

Montana DEQ Forest Fire Smoke Advisory

September 02, 2007

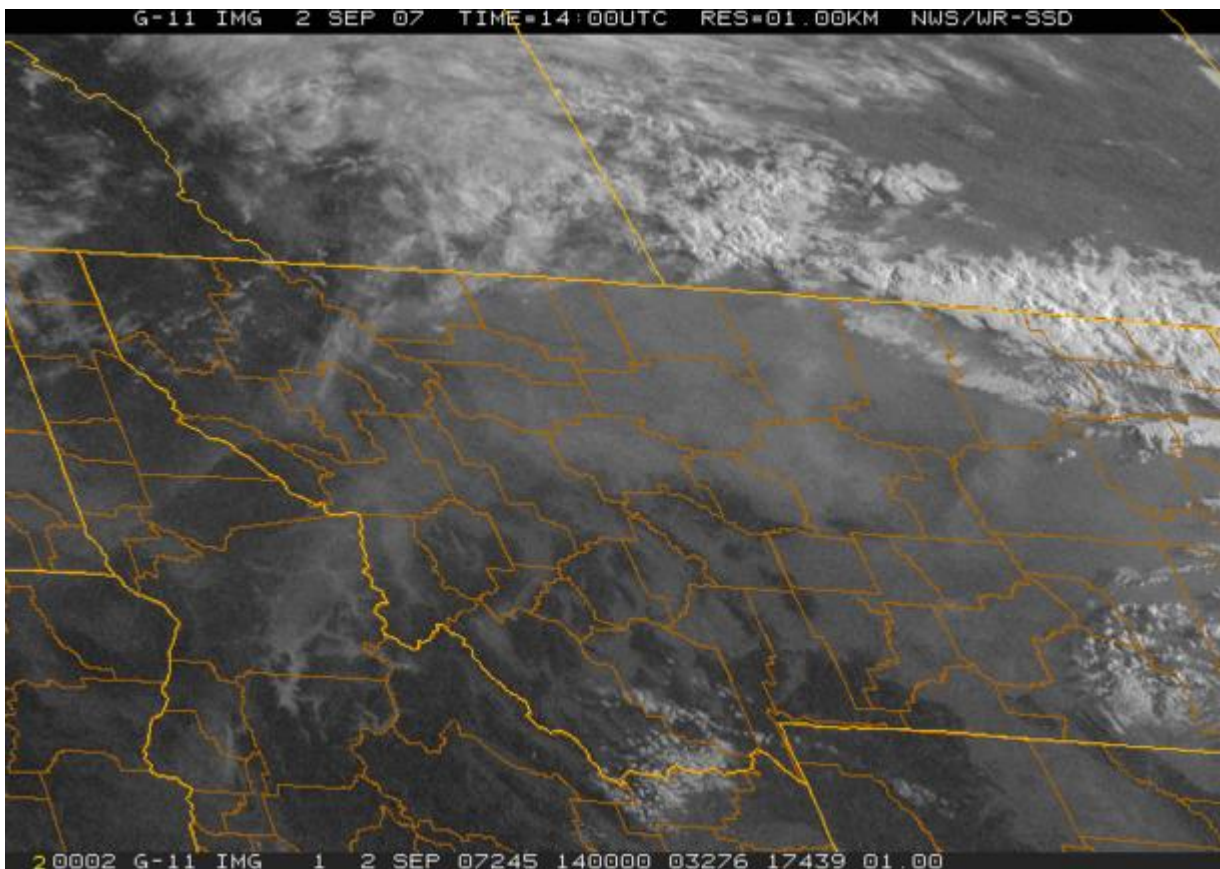
10:00 AM Sunday

FORECAST:

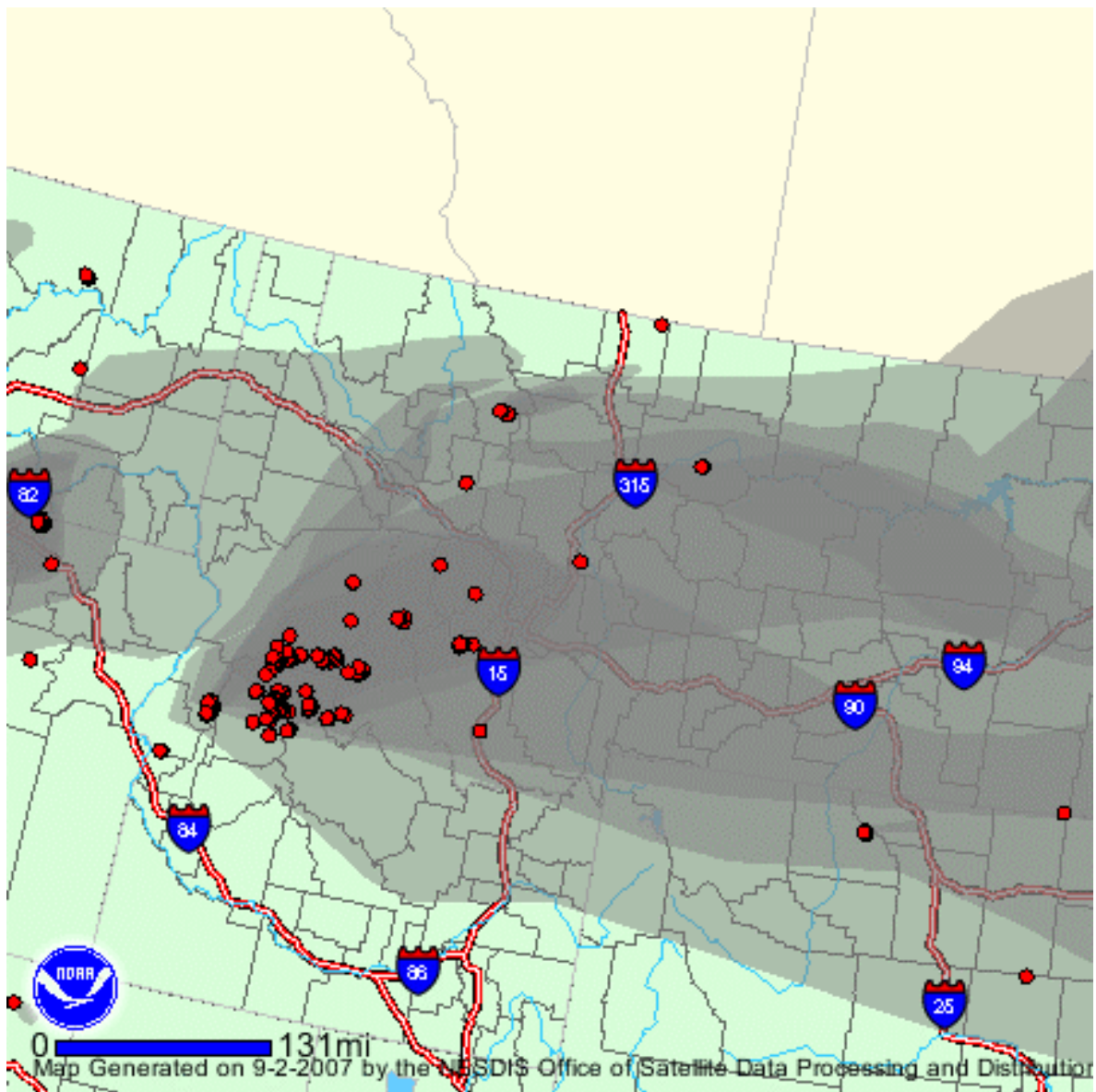
The smoke plume from yesterday's fire activity is across the northern third of the state this morning and hazy skies are noticeable there. Unhealthy levels of smoke have been trapped in the Bitterroot valley this morning and conditions in the Big Hole and Rock Creek/Flint Creek valleys are also expected to be poor. Continued technical difficulties with the AIRNOW server means no new data in the AIRNOW cities has been posted since Friday evening.

Hot and dry weather will continue today for more smoke this evening. Conditions in the western valleys should improve as the smoke mixes out this afternoon. Some smoke will be noticeable temporarily at the surface under the plume aloft as the smoke mixes down later this morning. Direct plume impacts from local fires could be a problem this afternoon and evening. Residents near active fires or experiencing noticeable smoke levels should use the VISIBILITY GUIDELINES to determine smoke levels in their area and guide their activity decisions.

A morning satellite photo centered on Great Falls is illustrated below:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage).

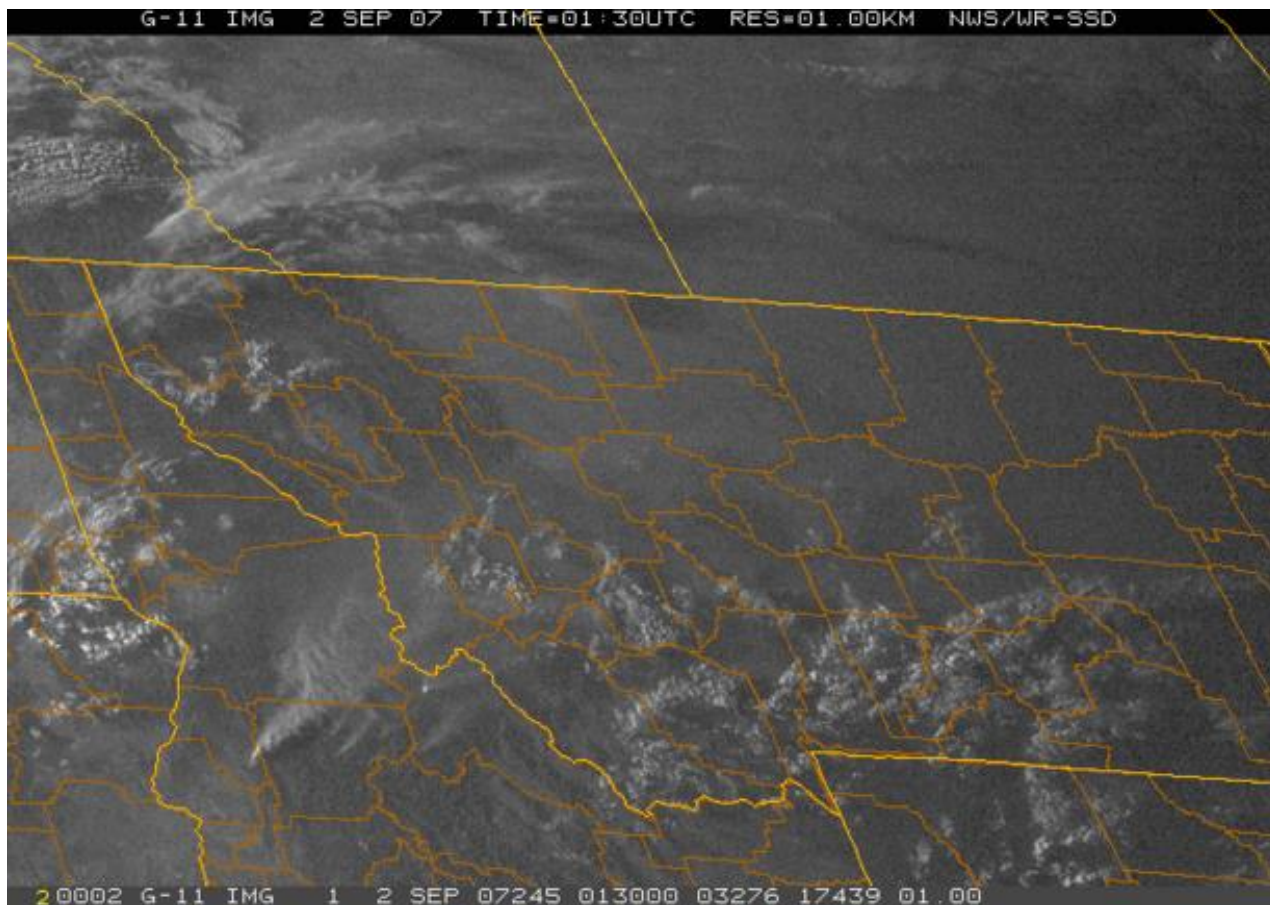


Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lq_fire2.php

This satellite photo taken at 7:30 PM last night shows the smoke plume moving into Montana from the fires in Idaho.



This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

<http://www.deq.state.mt.us/FireUpdates/SmokeCategories.asp>

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DISCUSSION:

Smoke production levels in Montana have reduced substantially but the fires in Idaho continue to pump smoke into the state. A very strong inversion under the high pressure and clear skies has trapped smoke in the Bitterroot valley. Hamilton is at UNHEALTHY FOR SENSITIVE this morning. Technical difficulties with the AIRNOW server continue and no new data has been posted since Friday evening from that source. USFS monitors and airport visibility measurements are the only source of remote information for this morning's report. The advisories in the table below represent conditions between midnight and 8 AM and may change substantially through the day. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the [visibility guidelines](#) to determine current conditions.

John Coefield

Meteorologist

Montana Department of Environmental Quality

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

**Updated 10 AM
September 02, 2007**

These advisories represent conditions between midnight and 8 AM and may change substantially through the day

NOTE: TECHNICAL DIFFICULTIES THIS MORNING (see note above)

<u>HAZARDOUS</u>	
<u>VERY UNHEALTHY</u>	
<u>UNHEALTHY</u>	
<u>UNHEALTHY FOR SENSITIVE GROUPS</u>	Hamilton T1(USFS)
<u>MODERATE</u>	

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm)	Visibility value from twice/day reporting stations
(est)	estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local visibility guidelines <http://www.deq.state.mt.us/FireUpdates/VisibilityRanges.asp> to evaluate possible health risks and make informed activity decisions.